

IN THE SPECIFICATION:

1. (withdrawn) A method of forming electrical connection members on an electrical structure comprising the steps of:

providing an electrical structure with a set of contacts;

forming at least one interface layer adhering to said set of contacts;

patterning said interface layer to form a set of pads disposed over said set of contacts;

depositing and lithographically patterning a layer of photoresist with a set of apertures over said set of pads;

forming a set of conductive pins adhering directly to said pad;

forming a barrier layer adhering to all exposed surfaces of said set of pins;

forming a layer of solder surrounding the barrier layer; and

reflowing the layer of solder.

2. (withdrawn) A method according to claim 1, in which the material of the barrier layer blocks passage of material from the pins, thereby preventing the material from the pins from reacting with a constituent of the solder.

3. (withdrawn) A method according to claim 1, in which the interface layer comprises a layer of adhesion material and a seed layer.

4. (withdrawn) A method according to claim 2, in which the interface layer comprises a layer of adhesion material and a seed layer.
5. (withdrawn) A method according to claim 1, in which the interface layer includes material selected from the group comprising TiW, Ti, Ta, Cr and TaN.
6. (withdrawn) A method according to claim 2, in which the interface layer includes material selected from the group comprising TiW, Ti, Ta, Cr and TaN.
7. (withdrawn) A method according to claim 3, in which the interface layer includes material selected from the group comprising TiW, Ti, Ta, Cr and TaN.
8. (withdrawn) A method according to claim 4, in which the interface layer includes material selected from the group comprising TiW, Ti, Ta, Cr and TaN.
9. (withdrawn) A method according to claim 1, in which the pins are formed by electroplating material into the apertures in the photoresist.
10. (withdrawn) A method according to claim 1, in which the pins are plated with a wetting layer before the step of forming a layer of solder.

11. (withdrawn) A method according to claim 10, in which the material of the barrier layer blocks passage of material from the pins, thereby preventing the material from the pins from reacting with a constituent of the solder.

12. (withdrawn) A method according to claim 10, in which the interface layer comprises a layer of adhesion material and a seed layer.

13. (withdrawn) A method according to claim 11, in which the interface layer comprises a layer of adhesion material and a seed layer.

14. (original) An electrical structure containing electrical connection members adapted for connecting to another electrical structure comprising:

a first set of contacts in an electrical structure;

at least one interface layer adhering to said set of contacts;

a set of pads disposed over said set of contacts and including said interface layer;

a set of conductive pins adhering directly to said pads;

a barrier layer adhering to all exposed surfaces of said set of pins; and

a layer of solder surrounding the barrier layer.

15. (original) A structure according to claim 14, in which the material of the barrier layer blocks passage of material from the pins, thereby preventing the material from the pins from reacting with a constituent of the solder.
16. (original) A structure according to claim 14, in which the interface layer comprises a layer of adhesion material and a seed layer.
17. (original) A method according to claim 15, in which the interface layer comprises a layer of adhesion material and a seed layer.
18. (original) A method according to claim 14, in which the interface layer includes material selected from the group comprising TiW, Ti, Ta, Cr and TaN.
19. (original) A method according to claim 15, in which the interface layer includes material selected from the group comprising TiW, Ti, Ta, Cr and TaN.
- 20 (original) A method according to claim 14, in which a wetting layer selected from the group comprising Cu and Au is formed on the barrier layer.